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10/595,245	03/29/2006	Hyung-Nam Choi	0118163-002	5479

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EXAMINER
PEACHES, RANDY

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/595,245	CHOI, HYUNG-NAM
	Examiner	Art Unit	
	RANDY PEACHES	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>3-29-09</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>19-36</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>19-26,29-31 and 33-36</u> is/are rejected.

7) ☒ Claim(s) <u>27,28 and 32</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>7/25/08,6/27/06,4/19/06,3/29/06</u>

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

1. **Claim 34** is rejected under 35 U.S.C. 112, first paragraph, because the

specification, while being enabling for signaling, does not reasonably provide

enablement for "create a suitable signaling". The specification does not enable any

person skilled in the art to which it pertains, or with which it is most nearly connected, to

deduce what a definite suitable signal may be.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

1. **Claims 19-26, 29-31 and 33-36** are rejected under 35 U.S.C. 102(e) as being

anticipated by Chang (U.S. Patent Number 7,359,345 B1).

Regarding **claim 19,** Chang et al. discloses the signaling between the MAC transmitting

entity and the MAC receiving entity operating in accordance with the Universal Mobile

Telecommunications System standard (UMTS), comprising performing in-band

signaling, whereby Chang et al. teaches in that a MAC signaling message is sent

containing both control and signaling information (see column 6 lines 30-34), of

information relevant to the UMTS base station (BS) at the MAC layer level. See

column 6 lines 25-39.

Regarding *claim 20*, according to *claim 19*, Chang et al. continues to disclose wherein

introducing a plurality of signaling transport blocks (STB) for signaling between a user

terminal equipment (UE) and a particular UMTS base station (BS) at the MAC layer

level. See column 8 lines 50-67, column 9 lines 11-27 and FIGURE 11.

Regarding *claim 21*, according to *claim 20*, Chang et al. continues to disclose wherein

at least one signaling transport block (STB) is multiplexed within the transport blocks of

a transport channel that are to be transmitted. See column 6 lines 47-50 and FIGURE

19, column 11 lines 58-67.

Regarding *claim 22*, according to *claim 19*, Chang et al. continues to disclose wherein

a dedicated or common transport channel is used. See column 9 lines 3-10.

Regarding *claim 23*, according to *claim 20*, Chang et al. continues to disclose wherein

at least one signaling transport block (STB) transmits, in the field (TN UL), an uplink

transmission number which is used for tracking the transmission status in the uplink, said field being k bits long. See FIGURE 17, column 11 lines 35-43.

Regarding *claim 24*, according to *claim 20*, Chang et al. continues to disclose wherein at least one signaling transport block (STB) transmits, in a field (TN DL), a downlink transmission number which is used for tracking the transmission status in the downlink, said field being k bits long. See FIGURE 13 and 14, column 9 lines 28-53.

Regarding *claim 25* according to *claim 20*, Chang et al. continues to disclose wherein at least one signaling transport block (STB) transmits a field (Poll) in order to request an acknowledgment of successful transmission of a signaling transport block within a specified time from the receiver, said field being k bits long. See column 12 lines 20-28.

Regarding *claim 26*, according to *claim 20*, Chang et al. continues to disclose wherein at least one signaling transport block (STB) transmits a field (MT) in which a message type is specified which is transmitted in the following message part, said field being 1-bit coded, whereby an indication bit details whether a MAC PDU or MAC SDU is being transmitted. See column 8 lines 50-61.

Regarding *claim 29*, according to *claim 20*, Chang et al. continues to disclose wherein a signaling transport block (STB) transmits a field (Pad) which is used for padding out

the unused part in the MAC Service Data Unit (MAC SDU) with dummy bits. See
FIGURE 12.

Regarding *claim 30*, according to *claim 20*, Chang et al. continues to disclose wherein
comprising exchanging, in the signaling transport block (STB), various radio resource
control messages between the base station (BS) and a user equipment (UE). See
column 6 lines 40-57.

Regarding *claim 31*, according to *claim 20*, Chang et al. continues to disclose wherein
comprising introducing, in the MAC header, a data field (D/C) that indicates the type of a
particular transport block. See column 8 lines 35-44.

Regarding *claim 33*, Chang et al. discloses a communication system, comprising:

- at least one base station (BS), which is controlled by a higher-order radio
  network control entity (RNC). See column 9 lines 28-53; and
- a radio cell (CE) served by the base station (BS) in which there exists a
  communications connection between the base station (BS) and at least one user
  terminal equipment (UE) over an air interface (Uu) with a UMTS protocol
  structure. See column 4 lines 50-67 and column 5 line 1-13;
- wherein a plurality of RRC functionalities are disposed in the form of at least one
  control and/or data processing means transferred the radio network control entity
  RNC to the base station (BS).   See column 5 lines 60-67 and column 6 lines 1-9

Regarding *claim 35*, according to *claim 33*, Chang et al. continues to disclose wherein comprising a plurality of special signaling transport blocks (STB) and two different transport block formats are provided, MAC PDU and MAC SDU. See column 8 lines 50-61.

Regarding *claim 36*, according to *claim 1*, Chang et al. continues to disclose wherein a memory for storing instructions that when executed by a data processing system, allows said data processing system, in conjunction with a communication system to appropriately implement according to a UMTS standard. See ABSTRACT and column 6 lines 25-39.

Allowable Subject Matter

Claims 27-28 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDY PEACHES whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randy Peaches/
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617